Exonuclease I (*E. coli*)

Catalog: RK20531
Size: 1,500 U / 3,000 U / 15,000 U
Concentration: 20,000 U/ml
Components:

Exonuclease I (*E.coli*) (20,000 U/ml)	RM20519
10X Exonuclease I Reaction Buffer	RM20130

Product Description

Exonuclease I (*E. coli*) catalyzes the removal of nucleotides from single-stranded DNA in the 3' to 5' direction.
Exonuclease I degrades excess single-stranded primer oligonucleotides from a reaction mixture containing double-stranded extension products.

Product Source:
An *E. coli* strain that carries the cloned Exo I gene from *E. coli* NM554.

Unit Definition:
One unit is defined as the amount of enzyme that catalyzes the release of 10 nmol of acid-soluble nucleotide in a total reaction volume of 50 µl in 30 minutes at 37°C in 1X Exonuclease I Reaction Buffer with 0.17 mg/ml single-stranded [^{3}H]-DNA.

Reaction Conditions
1X Exonuclease I Reaction Buffer; Incubate at 37°C

1X Exonuclease I Reaction Buffer:
67 mM Glycine-KOH, 6.7 mM $MgCl_2$, 10 mM β-ME, pH 9.5 @ 25°C

Storage Temperature: -20°C

Storage Conditions:
10 mM Tris-HCl, 100 mM NaCl, 5 mM β-ME, 0.5 mM EDTA, 100 µg/ml BSA, 50% Glycerol, pH 7.5 @ 25°C.

Heat Inactivation: 80°C for 20 min

Instructions

Enzymatic PCR Cleanup Protocol

1. Add 0.5 µl of Exo I and 1 µl of rSAP to 5 µl of PCR product.
2. Incubate the mix at 37°C for 15 minutes.
3. Inactivate both enzymes at 80°C for 15 minutes.
4. PCR products are ready for downstream application.

QC Process:

- Purity is above 95% detected by SDS-PAGE.
- No endonucleases, non-specific DNase, and other RNases contamination.
- No residual host genomic DNA is detected by PCR.